# GA-H87-HD3 (rev. 1.0)
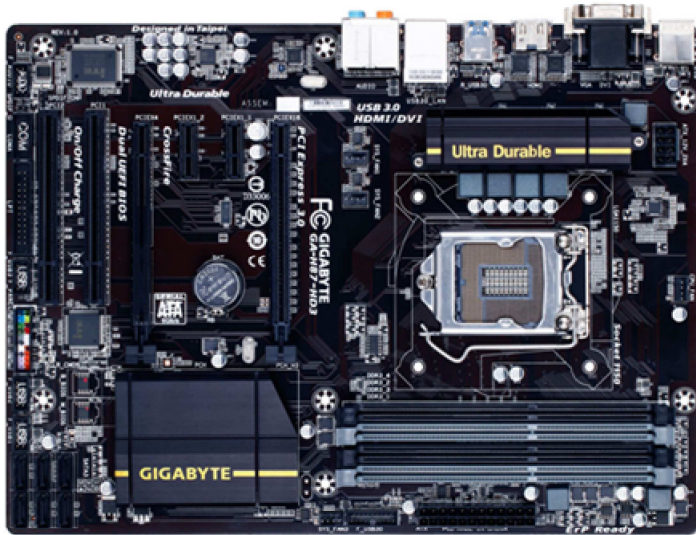
Intel® H87 Chipset          | Microsite

- Supports 4<sup>th</sup> Generation Intel® Core™ processors
- GIGABYTE Ultra Durable™ 4 Plus Technology
- GIGABYTE Hybrid Digital Power Engine
- GIGABYTE UEFI DualBIOS™
- Gold Plated CPU Socket
- Multi-GPU Support
- GIGABYTE 333™ Onboard Acceleration (USB 3.0, SATA 3.0 & 3x USB Power)
- GIGABYTE On/Off Charge™ for USB devices
- HDMI, DVI, D-SUB
- Intel® Small Business Advantage

Where to Buy

RSS

| CPU | 1. Support for Intel® Core™ i7 processors/Intel® Core™ i5 processors/Intel® Core™ i3 processors/Intel® Pentium® processors/Intel® Celeron® processors in the LGA1150 package<br>2. L3 cache varies with CPU<br><br>(Please refer "CPU Support List" for more information.) |
|---|---|
| Chipset | 1. Intel® H87 Express Chipset |
| Memory | 1. 4 x 1.5V DDR3 DIMM sockets supporting up to 32 GB of system memory<br>   * Due to a Windows 32-bit operating system limitation, when more than 4 GB of physical memory is installed, the actual memory size displayed will be less than the size of the physical memory installed.<br>2. Dual channel memory architecture<br>3. Support for DDR3 1600/1333 MHz memory modules<br>4. Support for non-ECC memory modules<br>5. Support for Extreme Memory Profile (XMP) memory modules<br><br>(Please refer "Memory Support List" for more information.) |
| Onboard Graphics | Integrated Graphics Processor:<br><br>1. 1 x D-Sub port<br>2. 1 x DVI-D port, supporting a maximum resolution of 1920x1200@60 Hz<br>   * The DVI-D port does not support D-Sub connection by adapter.<br>3. 1 x HDMI ports, supporting a maximum resolution of 4096x2160@24 Hz<br>   * Support for HDMI 1.4a version.<br>4. Maximum shared memory of 1 GB |
| Audio | 1. Realtek® ALC892 codec<br>2. High Definition Audio<br>3. 2/4/5.1/7.1-channel |

| | |
|---|---|
| | 4. Support for S/PDIF In |
| | 5. Support for S/PDIF Out |
| **LAN** | 1. Realtek® GbE LAN chip (10/100/1000 Mbit) |
| **Expansion Slots** | 1. 1 x PCI Express x16 slot, running at x16 (PCIEX16)<br>(The PCIEX16 slot conforms to PCI Express 3.0 standard.)<br>* For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot.<br><br>2. 1 x PCI Express x16 slot, running at x4 (PCIEX4)<br>* The PCIEX4 slot shares bandwidth with all PCI Express x1 slots. All PCI Express x1 slots will become unavailable when a PCIe x4 expansion card is installed.<br>* When installing a x8 or above card in the PCIEX4 slot, make sure to set PCIE Slot Configuration in BIOS Setup to x4.<br><br>3. 2 x PCI Express x1 slots<br>(The PCIEX4 and PCI Express x1 slots conform to PCI Express 2.0 standard.)<br><br>4. 2 x PCI slots |
| **Multi-Graphics Technology** | 1. Support for AMD CrossFire™ technology<br>* The PCIEX16 slot operates at up to x4 mode when AMD CrossFire™ is enabled. |
| **Storage Interface** | Chipset:<br>1. 6 x SATA 6Gb/s connectors supporting up to 6 SATA 6Gb/s devices<br>2. Support for RAID 0, RAID 1, RAID 5, and RAID 10 |
| **USB** | Chipset:<br>1. Up to 6 USB 3.0/2.0 ports (4 ports on the back panel, 2 ports available through the internal USB header)<br>2. Up to 8 USB 2.0/1.1 ports (2 ports on the back panel, 6 ports available through the internal USB headers) |
| **Internal I/O Connectors** | 1. 1 x 24-pin ATX main power connector<br>2. 1 x 8-pin ATX 12V power connector<br>3. 6 x SATA 6Gb/s connectors<br>4. 1 x CPU fan header<br>5. 3 x system fan headers<br>6. 1 x front panel header<br>7. 1 x front panel audio header<br>8. 1 x S/PDIF Out header<br>9. 1 x S/PDIF In header<br>10. 1 x USB 3.0/2.0 header<br>11. 3 x USB 2.0/1.1 headers<br>12. 1 x serial port header<br>13. 1 x parallel port header<br>14. 1 x Clear CMOS jumper |
| **Back Panel Connectors** | 1. 1 x PS/2 keyboard/mouse port<br>2. 1 x D-Sub port<br>3. 1 x DVI-D port<br>4. 1 x HDMI port<br>5. 4 x USB 3.0/2.0 ports |

| | 6. 2 x USB 2.0/1.1 ports |
| --- | --- |
| | 7. 1 x RJ-45 port |
| | 8. 6 x audio jacks (Center/Subwoofer Speaker Out/Rear Speaker Out/Side Speaker Out/Line In/Line Out/Microphone) |
| **I/O Controller** | 1. iTE® I/O Controller Chip |
| **H/W Monitoring** | 1. System voltage detection<br>2. CPU/System temperature detection<br>3. CPU/System fan speed detection<br>4. CPU overheating warning<br>5. CPU/System fan fail warning<br>6. CPU/System fan speed control<br>   * Whether the fan speed control function is supported will depend on the cooler you install. |
| **BIOS** | 1. 2 x 64 Mbit flash<br>2. Use of licensed AMI EFI BIOS<br>3. Support for DualBIOS™<br>4. PnP 1.0a, DMI 2.0, SM BIOS 2.6, ACPI 2.0a |
| **Unique Features** | 1. Support for Q-Flash<br>2. Support for Xpress Install<br>3. Support for APP Center<br>   * Available applications in APP Center may differ by motherboard model. Supported functions of each application may also differ depending on motherboard specifications.<br>   @BIOS<br>   EasyTune<br>   EZ Setup<br>   USB Blocker<br>4. Support for ON/OFF Charge |
| **Bundle Software** | 1. Norton Internet Security (OEM version)<br>2. Intel® Rapid Start Technology<br>3. Intel® Smart Connect Technology<br>4. Intel® Smart Response Technology<br>5. Intel® Small Business Advantage |
| **Operating System** | 1. Support for Windows 8/7 |
| **Form Factor** | 1. ATX Form Factor; 30.5cm x 22.5cm |
| **Remark** | 1. Due to different Linux support condition provided by chipset vendors, please download Linux driver from chipset vendors' website or 3rd party website.<br>2. Most hardware/software vendors may no longer offer drivers to support Win9X/ME/2000/XP SP1/SP2. If drivers are available from the vendors, we will update them on the GIGABYTE website. |

* The entire materials provided herein are for reference only. GIGABYTE reserves the right to modify or revise the content at anytime without prior notice.

* Advertised performance is based on maximum theoretical interface values from respective Chipset vendors or organization who defined the interface specification.

Actual performance may vary by system configuration.